

CLAIM AMENDMENTS

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 – 6. (Cancelled).

7. (Currently Amended) A pellicle comprising:

a frame; and

an amorphous fluoropolymer thin film including an optical thickness coupled to the frame, the optical thickness operable to ~~shift a peak in transmission for normal incidence light to a wavelength greater than an exposure wavelength and~~ maximize transmission of ~~[[the]]~~ an exposure wavelength at an angle of incidence greater than zero;

the thin film formed to cooperate with a photomask including an opening and facilitate projection of an image including spatial information associated with the opening from the photomask onto a surface, the spatial information operable to increase resolution of the image.

8. (Currently Amended) The pellicle of Claim 7, ~~wherein maximizing transmission of the exposure wavelength at the angle of incidence greater than zero comprises~~ further comprising the optical thickness ~~being~~ greater than a design thickness by less than or equal to approximately one-quarter of the exposure wavelength, the design thickness operable to produce a peak in transmission for normal incidence light at the exposure wavelength.

9. (Currently Amended) The pellicle of Claim 7, further comprising ~~[[the]]~~ a peak in transmission for normal incidence light located between approximately one nanometer and approximately twenty nanometers above the exposure wavelength.

10. (Original) The pellicle of Claim 7, further comprising an anti-reflective coating disposed on a top surface and a bottom surface of the thin film.

11. (Original) The pellicle of Claim 10, wherein the anti-reflective coating includes a first refractive index approximately equal to the square root of a second refractive index associated with the thin film.

12. **(Currently Amended)** The pellicle of Claim 10, further comprising ~~[[the]]~~ **a** peak in transmission **for normal incidence light** located between approximately one nanometer and approximately twenty nanometers above the exposure wavelength.

13. (Original) The pellicle of Claim 10, wherein the anti-reflective coating includes a thickness between approximately one-quarter of the exposure wavelength and approximately one-half of the exposure wavelength.

14. (Original) The pellicle of Claim 7, further comprising a plurality of adjoining anti-reflective coatings disposed on a top surface and a bottom surface of the thin film, each of the anti-reflective coatings including a different refractive index.

15. (Cancelled).

16. (Original) The pellicle of Claim 7, wherein:
the thin film includes a thickness of approximately 855 nanometers; and
the exposure wavelength is between approximately 248 nanometers and approximately 436 nanometers.

17. (Currently Amended) A photolithography system for optimizing off-axis transmission of light, comprising:

a photomask including an opening; and

a pellicle comprising:

a frame coupled to the photomask; and

an amorphous fluoropolymer thin film operable to transmit approximately ninety-nine percent (99%) of off-axis light at an exposure wavelength such that an image of the opening projected onto a surface by the photomask includes spatial information contained in the off-axis light, the spatial information operable to increase resolution of the image~~the thin film including an optical thickness that shifts a peak in transmission for normal incidence light to a wavelength greater than the exposure wavelength.~~

18. (Currently Amended) The system of Claim 17, ~~wherein transmitting approximately 99% of the off-axis light at the exposure wavelength comprises further comprising~~ the thin film including an optical thickness ~~being~~ greater than a design thickness by less than or equal to approximately one-quarter of the exposure wavelength, the design thickness operable to produce a peak in transmission for normal incidence light at the exposure wavelength.

19. (Currently Amended) The system of Claim 17, further comprising ~~[[the]]~~ a peak in transmission for normal incidence light located between approximately one nanometer and approximately twenty nanometers above the exposure wavelength.

20. (Original) The system of Claim 17, further comprising an anti-reflective coating disposed on a top surface and a bottom surface of the thin film, the anti-reflective coating including a thickness between approximately one-quarter of the exposure wavelength and approximately one-half of the exposure wavelength.

21. (Currently Amended) The system of Claim 20, further comprising ~~[[the]]~~ a peak in transmission for normal incidence light located between approximately one nanometer and approximately twenty nanometers above the exposure wavelength.

22. (Original) The system of Claim 20, wherein the anti-reflective coating includes a first refractive index approximately equal to the square root of a second refractive index associated with the thin film.

23. (Original) The system of Claim 17, further comprising a plurality of adjoining anti-reflective coatings disposed on a top surface and a bottom surface of the thin film, each of the anti-reflective coatings including a different refractive index.

24. (Original) The system of Claim 17, wherein the frame comprises aluminum.

25. (Cancelled).

26. **(Currently Amended)** A method for performing photolithography, comprising:
forming an amorphous fluoropolymer thin film including an optical thickness, the optical thickness operable to ~~shift a peak in transmission for normal incidence light to a wavelength greater than an exposure wavelength and~~ maximize transmission of ~~[[the]]~~ at least one exposure wavelength at an angle of incidence greater than zero;

attaching the thin film to a frame to form a pellicle;

mounting the pellicle on a photomask including an opening;

exposing the pellicle and the photomask to radiant energy having the exposure wavelength; and

projecting the radiant energy through the opening in the photomask to form an image on a surface, the thin film operable to facilitate projection of spatial information associated with the ~~image~~ opening and increase resolution of the image.

27. (Original) The method of Claim 26, further comprising coating a top surface of the thin film with an anti-reflective material, the anti-reflective material including a thickness between approximately one-quarter of the exposure wavelength and approximately one-half of the exposure wavelength.

28. (Original) The method of Claim 27, further comprising coating a bottom surface of the thin film with the anti-reflective material.

29. **(Currently Amended)** The method of Claim 26, further comprising ~~[[the]]~~ **a** peak in transmission **for normal incidence light** located between approximately one nanometer and approximately twenty nanometers above the exposure wavelength.

30. (Original) The method of Claim 26, further comprising coating at least one of a top surface and a bottom surface of the thin film with a plurality of adjoining layers of anti-reflective material, each layer including a different refractive index.